

AMENDMENTS TO THE CLAIMS:


Please cancel Claims 1-7 without prejudice or disclaimer of the subject matter presented therein.

Please amend Claims 8-15 as follows. In accordance with the revised amendment format, all claims are presented below.

1-7 (Cancelled)

8. (Currently amended) An image pickup apparatus comprising:

first and second photoelectric conversion units each including a plurality of photoelectric conversion elements;

 microscopes a first microlens provided ~~respectively in~~ for said first and second photoelectric conversion ~~units~~ unit, for focusing light onto the plurality of photoelectric conversion elements included in ~~each of~~ said first and second photoelectric conversion ~~units~~ unit;

a second microlens provided for said second photoelectric conversion unit, for focusing light onto the plurality of photoelectric conversion elements included in said second photoelectric conversion unit;

a first holding unit adapted to hold signals from said first photoelectric conversion unit, said first holding unit including at least the same number of capacitors as the number of the plurality of photoelectric conversion elements included in said first photoelectric conversion unit;

a second holding unit adapted to hold signals from said second

photoelectric conversion unit, said second holding unit including at least the same number of capacitors as the number of the plurality of photoelectric conversion elements included in said second photoelectric conversion unit; and

a first common output line to which signals ~~are read out~~ from the plurality of capacitors included in ~~each of~~ said first and second holding units, respectively, are read out sequentially,

wherein the signals from said first photoelectric conversion unit are transferred to said first holding unit through a first switch and the signals from said second photoelectric conversion unit are transferred to said second holding unit through a second switch.

9. (Currently amended) An image pickup apparatus according to claim 8, further comprising:

third and fourth photoelectric conversion units each including a plurality of photoelectric conversion elements;

~~microlenses~~ a third microlens provided ~~respectively in for~~ said third ~~and fourth~~ photoelectric conversion ~~units~~ unit, for focusing light onto the plurality of photoelectric conversion elements included in ~~each of~~ said third ~~and fourth~~ photoelectric conversion ~~units~~ unit;

a fourth microlens provided for said fourth photoelectric conversion unit, for focusing light onto the plurality of photoelectric conversion elements included in said fourth photoelectric conversion unit;

a second common output line to which signals ~~are sequentially read~~

out from said first and third photoelectric conversion units are read out sequentially;

a third common output line to which signals ~~are sequentially read~~
out from said second and fourth photoelectric conversion units are read out sequentially;

wherein the plurality of capacitors included in said first holding unit
hold the signals from said second common output line, and the plurality of capacitors
included in said second holding unit hold the signals from said third common output line,
and

wherein the signals from said third photoelectric conversion unit are
transferred to said first holding unit through said first switch and the signals from said
fourth photoelectric conversion unit are transferred to said second holding unit through said
second switch.

10. (Currently amended) An image pickup apparatus according to claim
8, wherein each of said first and second photoelectric conversion unit includes units
include an amplification unit adapted to amplify and output signals from the plurality of
photoelectric conversion elements of said first and second photoelectric conversion units,
said amplification unit being provided as a common amplification unit for the plurality of
photoelectric conversion elements of said first and second photoelectric conversion units.

11. (Currently amended) An image pickup apparatus according to claim
8,

wherein each of said first and second holding units includes a
capacity for holding at least the same number of noise signals as that of the plurality of

photoelectric conversion elements; and

wherein said image pickup apparatus further comprises a differential circuit adapted to subtract the noise signals from signals including photoelectric conversion signals generated by the photoelectric conversion elements.

12. (Currently amended) An image pickup apparatus according to claim 8, further comprising a control circuit adapted to perform focus adjustment based on a plurality of signals outputted sequentially from said first common output line.

13. (Currently amended) An image pickup apparatus according to claim 8, further comprising microlenses provided ~~respectively in~~ one for each of the plurality of photoelectric conversion elements.

14. (Currently amended) An image pickup apparatus comprising:
an image pickup area including a plurality of first photoelectric conversion elements and a second photoelectric conversion element; and
~~a plurality of microlenses for focusing light onto~~ first microlens
provided for the plurality of first photoelectric conversion elements included in said image pickup area;
a second microlens provided for the second photoelectric conversion element included in said image pickup area; and

a common output line to which a signal from the plurality of first
photoelectric conversion elements and a signal from the second photoelectric conversion

element are read out

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wherein ~~one microlens is provided for every photoelectric conversion element in a first image pickup region in said image pickup area, and one microlens is provided for every plurality of photoelectric conversion elements in a second image pickup region in said image pickup area.~~

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15. (Currently amended) An image pickup apparatus according to claim 14, further comprising a drive circuit having ~~in the first image pickup region~~ a mode for reading out, independently, the signals from the plurality of first photoelectric conversion elements ~~provided with a common microlens~~ and a mode for adding and reading out the signals from the plurality of first photoelectric conversion elements.
